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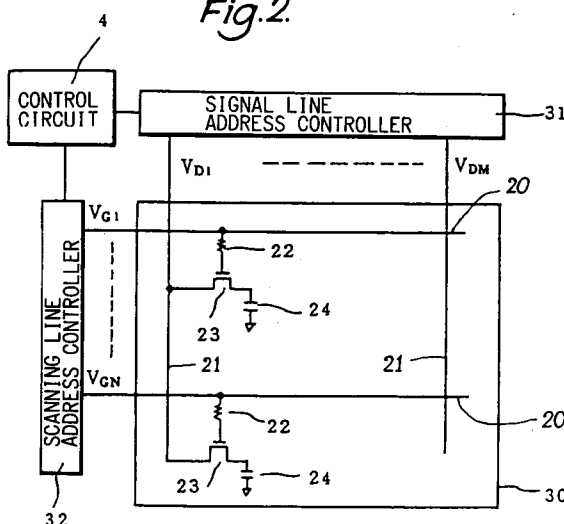
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DE FR GB IT NL(88) Date of deferred publication of the search report:
30.09.92 Bulletin 92/40(71) Applicant: **HITACHI, LTD.**
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MEWBURN ELLIS 2 Cursitor Street
London EC4A 1BO(GB)(54) **Display system.**

(57) A display system has signal lines (21) and scanning lines (20) arranged in a matrix with the signal lines (21) extending generally perpendicular to the scanning lines (20). At each intersection of the signal (21) and scanning lines (20) there is a display unit, each such unit having a display element (24) such as a liquid crystal display element, switching means (23) between the display element (24) and the signal line (21), and current limiting means (22) between the switching element (23) and the scanning line (20). By applying suitable signals to the signal (21) and scanning (22) lines, from suitable signal and scanning controllers (31,32), each display unit may be addressed. In order to prevent defects due to a short circuit across the switching element (23) between the current limiting means (22) and the signal line, signals are applied to the signal lines at times other than when signals are applied to the scanning lines (21), so as to apply a suitable voltage to any defective display unit so as to cause the display element (24) to be controlled so that it is in the desired state. Thus, if the display elements (24) are liquid crystals, they may be controlled so as to be dark if they are faulty.

Fig.2.



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EUROPEAN SEARCH REPORT

Application Number

EP 90 30 8474

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl. 5)
Y	DE-A-3 329 130 (K.K. SUWA SEIKOSHA) * Figures 1,5; abstract; page 8, line 25 - page 10, line 4 *	1,2,4, 23-25	G 09 G 3/36
A	---	20	
Y	EP-A-0 075 651 (IBM CORP.) * Figures 1,3; abstract; page 6, line 24 - page 7, line 8 *	1,2,4, 23-25	
A	---	12-14	
A	ELECTRONICS LETTERS, vol. 21, no. 8, 24 October 1985, pages 1051-1052, Stevenage, GB; S. SAKAI et al.: "Defect-tolerant active matrix circuit with duplicated data input routes for large liquid crystal display" * Figure 1; page 1051, right-hand column, line 42 - page 1052, left-hand column, line 15 *	3,9,11	
A	FR-A-2 582 431 (MITSUBISHI DENKI K.K.) * Figures 1,2,4; abstract; page 1, line 30 - page 2, line 22; page 4, lines 1-30; page 6, line 26 - page 7, line 12 *	9-11	TECHNICAL FIELDS SEARCHED (Int. Cl. 5)
A	US-A-4 609 256 (H. NAKAMURA) * Figure 2; column 7, lines 13-48 *	21	G 09 G
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 03-04-1992	Examiner CORSI F.
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document			



CLAIMS INCURRING FEES

The present European patent application comprised at the time of filing more than ten claims.

- ☐ All claims fees have been paid within the prescribed time limit. The present European search report has been drawn up for all claims.
- ☐ Only part of the claims fees have been paid within the prescribed time limit. The present European search report has been drawn up for the first ten claims and for those claims for which claims fees have been paid, namely claims:
- ☐ No claims fees have been paid within the prescribed time limit. The present European search report has been drawn up for the first ten claims.

LACK OF UNITY OF INVENTION

The Search Division considers that the present European patent application does not comply with the requirement of unity of invention and relates to several inventions or groups of inventions, namely:

See Sheet B.

- ☐ All further search fees have been paid within the fixed time limit. The present European search report has been drawn up for all claims.
- ☐ Only part of the further search fees have been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the inventions in respect of which search fees have been paid, namely claims:
- ☒ None of the further search fees has been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the invention first mentioned in the claims.

namely claims: 1 - 30



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LACK OF UNITY OF INVENTION

The Search Division considers that the present European patent application does not comply with the requirement of unity of invention and relates to several inventions or groups of inventions, namely:

1. Claims 1-30: Matrix active display where a voltage is applied to the signal lines during a non-scanning period to improve the appearance in case of short circuit across the pixel driving element and method thereon.
2. Claims 31-33: Method of manufacturing an active matrix display.